Comparisons of Job Characteristics

Focus Occupation: Forest and Conservation Technicians (19-4093)

Associated Occupation: Environmental Science and Protection Technicians, Including

Health (19-4091)

Compare Knowledge
Compare Skills
Compare Abilities
Compare Detailed Work Activities
Compare Tools and Technologies

| << | Focus occupation element is much lower |
|----|--|
| < | Focus occupation element is lower |
| 0 | Focus occupation element is at a similar level |
| > | Focus occupation element is at a higher level |
| >> | Focus occupation element is at a much higher level |

Knowledge

Similarity of Focus Occupation to Associated Occupation: 60

Focus Occupation: Forest and Conservation Technicians (19-4093)

Associated Occupation: Environmental Science and Protection Technicians, Including Health (19-4091)

| Associated Occupation's Key Knowledge Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | | Evaluation of Focus Occupation | |
|---|---------------------------------------|--------------------------------------|---------------------------------|----|--|--|
| Computers and Electronics | 8.4 | 13.6 | 10.4 | << | Extensive education and/or training may be required | |
| Chemistry | 4.8 | 13.2 | 5.4 | << | Extensive education and/or training may be required | |
| Biology | 3.7 | 11.4 | 9.4 | < | Expanded education and/or training may be required | |
| Public Safety and Security | 6.9 | 11.1 | 10.0 | < | Expanded education and/or training may be required | |
| Physics | 4.3 | 9.9 | 5.2 | << | Extensive education and/or training may be required | |
| Law and Government | 5.9 | 9.8 | 9.9 | 0 | Current knowledge level may be sufficient | |
| Geography | 3.9 | 9.7 | 13.3 | >> | Current knowledge level is likely more than sufficient | |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 81

Focus Occupation: Forest and Conservation Technicians (19-4093)

Associated Occupation: Environmental Science and Protection Technicians, Including Health (19-4091)

| Associated Occupation's Key Skills Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | | Evaluation of Focus Occupation |
|--|---------------------------------------|--------------------------------------|---------------------------------|----|--|
| Science | 4.5 | 10.3 | 6.0 | << | Extensive development of skills in this area may be required |
| Mathematics | 6.2 | 9.2 | 9.1 | 0 | Current skill level may be sufficient |
| Operations Analysis | 5.0 | 7.9 | 2.8 | << | Extensive development of skills in this area may be required |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 88

Focus Occupation: Forest and Conservation Technicians (19-4093)
Associated Occupation: Environmental Science and Protection Technicians, Including Health (19-4091)

| Associated Occupation's Key Abilities Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | | Evaluation of Focus Occupation | |
|---|---------------------------------------|--------------------------------------|---------------------------------|----|--|--|
| Written Expression | 9.8 | 12.9 | 9.4 | << | Extensive improvement in abilities may be required | |
| Near Vision | 11.1 | 12.8 | 11.5 | < | Some improvement in abilities may be required | |
| Mathematical Reasoning | 6.3 | 9.1 | 8.0 | < | Some improvement in abilities may be required | |
| Number Facility | 6.3 | 9.0 | 7.9 | < | Some improvement in abilities may be required | |
| Rate Control | 3.8 | 6.7 | 6.9 | 0 | Current ability level may be sufficient | |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 82

Focus Occupation: Forest and Conservation Technicians (19-4093)
Associated Occupation: Environmental Science and Protection Technicians, Including Health (19-4091)

| Work Activities | Exclusivity of Activity |
|--|-------------------------|
| Adhere to safety procedures | 12 |
| Advise clients or customers | 19 |
| Analyze biological research, test, or analysis data | 70 |
| Analyze scientific research data or investigative findings | 27 |
| Collect geographic or physical data | 81 |
| Collect scientific or technical data | 30 |
| Collect statistical data | 47 |
| Communicate technical information | 4 |
| Compile numerical or statistical data | 38 |
| Conduct field research or investigative studies | 52 |
| Conduct laboratory research or experiments | 57 |
| Determine negligence or violation of laws or regulations | 92 |
| Develop or maintain databases | 30 |
| Develop tables depicting data | 33 |
| Direct and coordinate activities of workers or staff | 3 |
| Draw maps or charts | 69 |
| Enforce laws, ordinances, or regulations | 66 |

| Ensure compliance with government regulations | 76 |
|---|----|
| Explain complex mathematical information | 30 |
| Follow safe waste disposal procedures | 50 |
| Issue licenses or permits | 84 |
| Maintain records, reports, or files | 5 |
| Obtain technical support instructions from scientists or engineers | 87 |
| Prepare reports | 8 |
| Record test results, test procedures, or inspection data | 48 |
| Use biological testing instruments | 73 |
| Use chemical testing or analysis procedures | 54 |
| Use computers to enter, access or retrieve data | 3 |
| Use government regulations | 44 |
| Use hazardous materials information | 35 |
| Use interpersonal communication techniques | 10 |
| Use knowledge of environmental laws and regulations | 76 |
| Use knowledge of investigation techniques | 16 |
| Use laboratory equipment | 60 |
| Use mathematical or statistical methods to identify or analyze problems | 30 |
| Use pollution control techniques | 62 |
| Use quantitative research methods | 35 |
| Use relational database software | 26 |
| Use scientific research methodology | 21 |
| Use spreadsheet software | 18 |
| Use word processing or desktop publishing software | 17 |

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 63

Focus Occupation: Forest and Conservation Technicians (19-4093)
Associated Occupation: Environmental Science and Protection Technicians, Including Health (19-4091)

| Tools and Technologies | Exclusivity |
|---|-------------|
| Business function specific software | 1 |
| Cameras | 2 |
| Computer data input devices | 2 |
| Computers | 1 |
| Content authoring and editing software | 1 |
| Data management and query software | 1 |
| Electrochemical measuring instruments and accessories | 9 |
| Humidity and moisture measuring instruments | 15 |
| Hydrological instruments | 31 |
| Industry specific software | 1 |
| Information exchange software | 1 |
| Light and wave generating and measuring equipment | 4 |

| Liquid and gas flow measuring and observing instruments | 15 |
|---|----|
| Meteorological instruments | 16 |
| Network applications software | 1 |
| Pumps | 9 |
| Sampling equipment | 12 |
| Soil measuring equipment | 20 |

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O^*NET (Occupation Information Network) data.